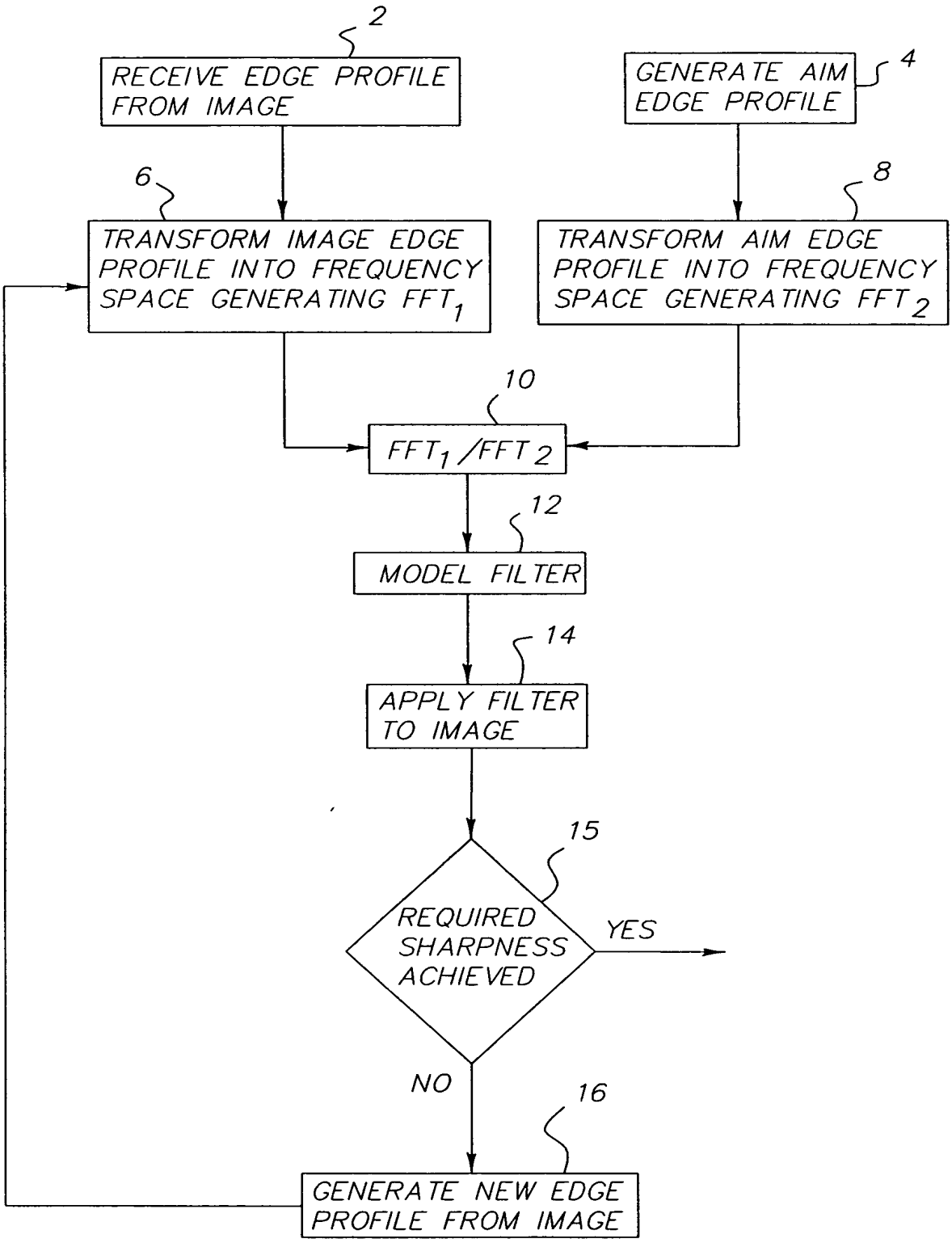
2
RECEIVE EDGE PROFILE FROM IMAGE
4
GENERATE AIM EDGE PROFILE
6
TRANSFORM IMAGE EDGE PROFILE INTO FREQUENCY SPACE GENERATING FFT1
8
TRANSFORM AIM EDGE PROFILE INTO FREQUENCY SPACE GENERATING FFT2
10
FFT1/FFT2
12
MODEL FILTER
14
APPLY FILTER TO IMAGE
15
REQUIRED SHARPNESS ACHIEVED
YES
NO
16
GENERATE NEW EDGE PROFILE FROM IMAGE

FIG. 1

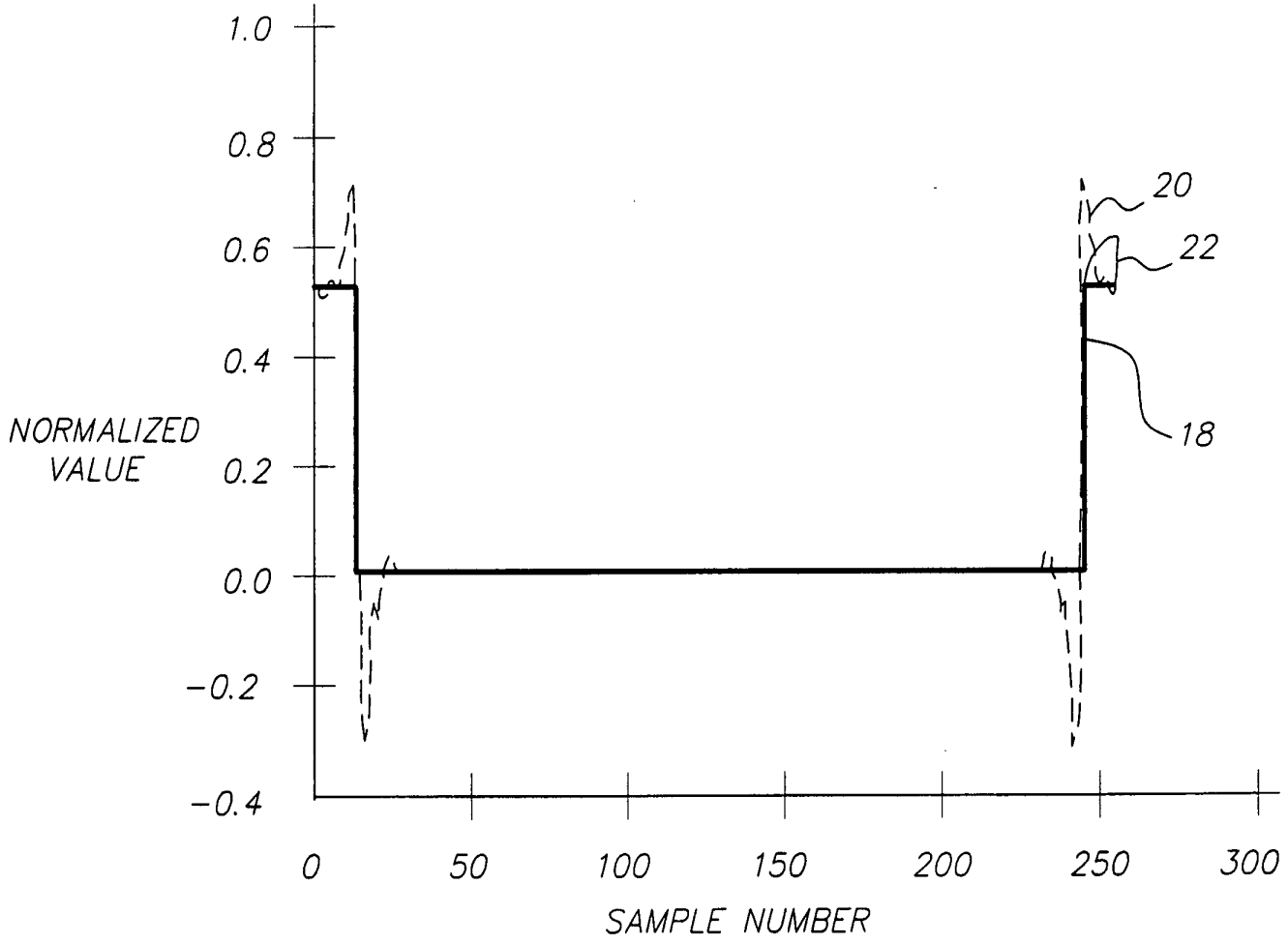
1.0
0.8
0.6
0.4
0.2
0.0
−0.2
−0.4
NORMALIZED VALUE
0
50
100
150
200
250
300
SAMPLE NUMBER
20
22
18

FIG. 2

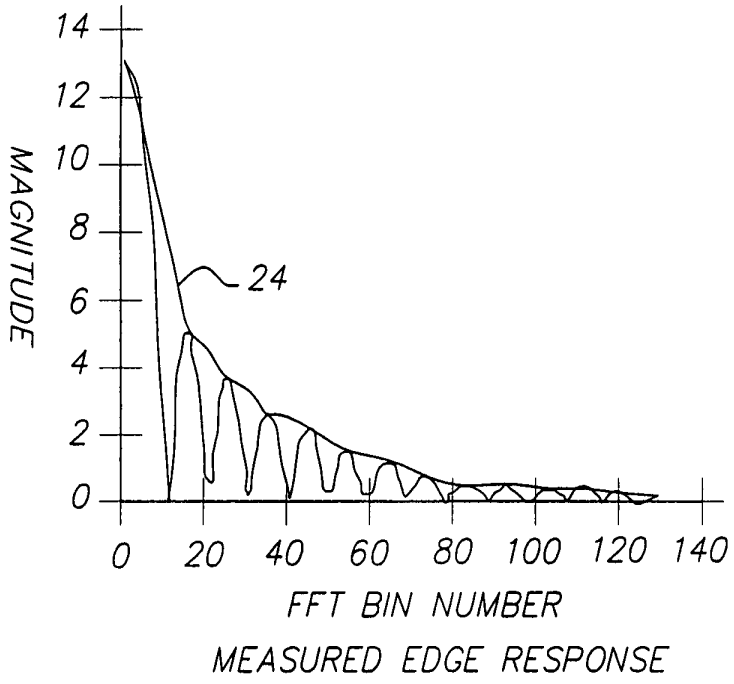
14
12
10
8
6
4
2
0
MAGNITUDE
24
0
20
40
60
80
100
120
140
FFT BIN NUMBER
MEASURED EDGE RESPONSE

FIG. 3A

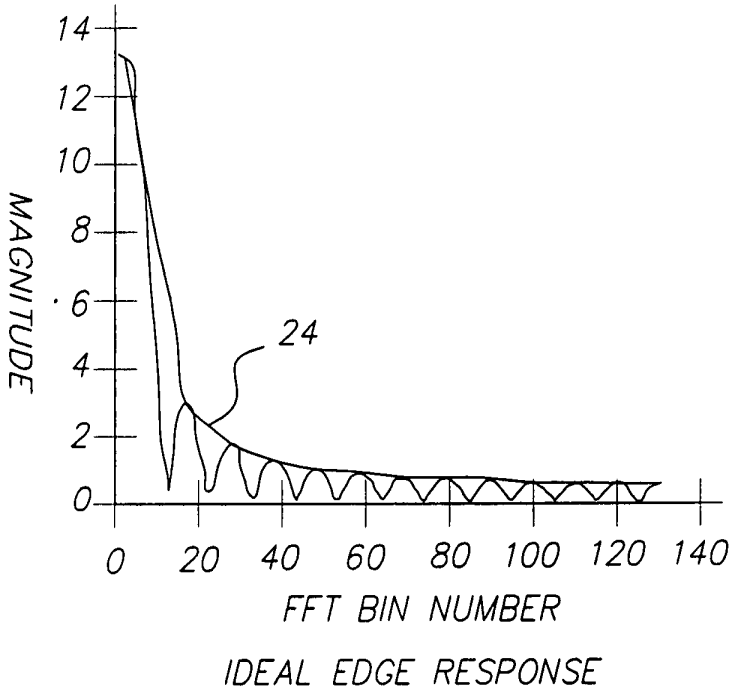
14
12
10
8
6
4
2
0
MAGNITUDE
24
0
20
40
60
80
100
120
140
FFT BIN NUMBER
IDEAL EDGE RESPONSE

FIG. 3B

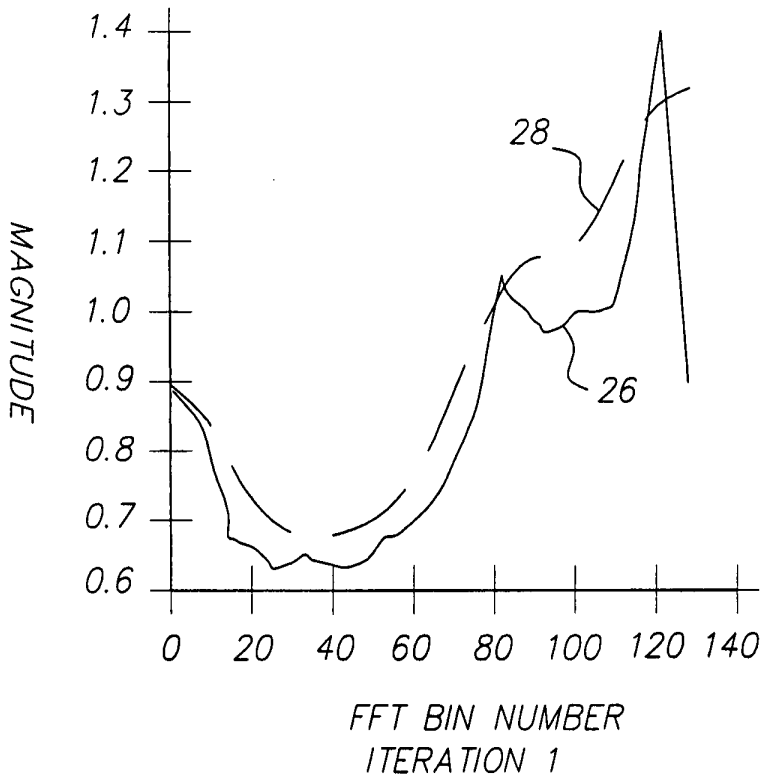
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
MAGNITUDE
28
26
0
20
40
60
80
100
120
140
FFT BIN NUMBER
ITERATION 1

FIG. 4A

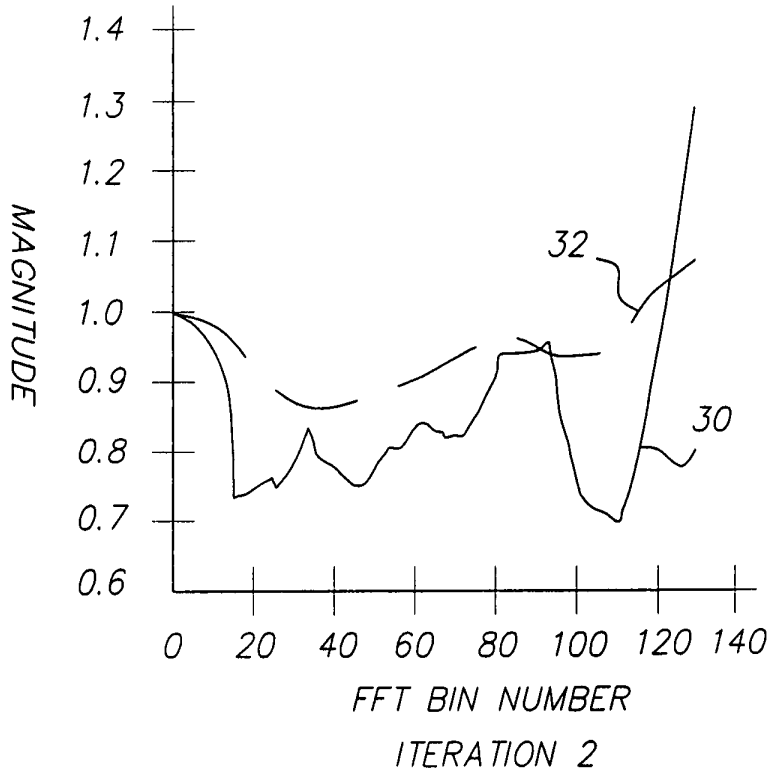
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
MAGNITUDE
32
30
0
20
40
60
80
100
120
140
FFT BIN NUMBER
ITERATION 2

FIG. 4B